

CROSS REFERENCE TO RELATED APPLICATIONS

The present application is the National Phase of International Application No.

PCT/GB99/01949, filed June 21, 1999, which was published in English.

Please replace the first paragraph on page 2 (Table 1) with the following paragraph:

Table 1

Promoter Response Elements			
Name	Sequence	Sensitivity	
ABRE	CCACGTT	ABA	
DRE1	TACCGACAT	Drought	
E-8	ATAAGGGGTTGGT		(SEQ ID NO:5)
G Box	GTGTCAC		
H Box	GGTAGG		
JA Box	CCCTATAGGG	JA?	(SEQ ID NO:6)
Myb	TGGTTA		
Myc	CANNTG		
PR Box	AGCCGCC	Ethylene	
TCA	TTATCTCCTT		(SEQ ID NO:7)

Please replace the second paragraph on page 5 with the following paragraph:

A number of elements present in PR gene promoters have been identified. The PR-2d gene (encoding a β -1,3-glucanase) from tobacco is expressed in tissue undergoing hypersensitive response (HR) following tobacco mosaic virus (TMV) challenge and is induced by exogenous SA (Shah *et al.*, *Plant J.* 10:1089-1101 (1996)). Region -364 to -288 in the PR-2d promoter

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3
B
cont

confers SA sensitivity and a 25 bp element in this region is recognised by nuclear factors from tobacco. An SA responsive element has also been isolated from the CaMV 35S promoter at position -90 to -46. The element corresponds to an as-1 site (Qin *et al.*, *Plant Cell* 6:863-874 (1994)). The sequence TCATCTTCTT (SEQ ID NO:8) is repeated several times in the barley β -1,3-glucanase promoter and is present in over 30 stress-induced genes (Goldsbrough *et al.*, *Plant J.* 3(4):563-571 (1993b)). This region binds 40 kDa tobacco nuclear proteins, the binding of which is increased in SA-treated plants. Buttner *et al.*, *Proc. Natl. Acad. Sci. USA* 94:5961-5966 (1997) have shown that Arabidopsis ethylene responsive element binding proteins bind to the PR box and that PR- and G-boxes exhibit synergistic effects.

Please replace the third paragraph on page 28 with the following paragraph:

3
B

FIGURE 1 shows the Nucleotide sequence of AoPRT-L cDNA (SEQ ID NO:2) together with the predicted amino-acid sequence of AoPRT-L (SEQ ID NO:3). The sequences and positions of binding of the primers used for IPCR (SEQ ID NO:4 and SEQ ID NO:10, respectively) are indicated above the cDNA sequence and relevant enzyme restriction sites underlined.

Please replace the last paragraph on page 28 with the following paragraph:

3
B

FIGURE 6 shows the Nucleotide sequence of the AoPRT-L promoter (SEQ ID NO:1). Sequences with homology to characterised promoter elements are boxed.

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Please replace the last paragraph on page 31 with the following paragraph:

B6
 P1 5'-CGCGGAATTCGGTGTAGGTGCATTTGTTGG-3' (SEQ ID NO:9) (105-86 bp) and
 EcoRI

Please replace the first paragraph on page 32 with the following paragraph:

B7
 P2 5'-CGCCTGCAGCCAATCCTGGACCCTCACCG-3' (SEQ ID NO:10) (152-172 bp)
 PstI

Please replace the last two paragraphs on page 32 with the following paragraphs:

B8
 5'-GGTACCAAGCTTCTTATTGCGACCTGACTCTC 3' (SEQ ID NO:11)
 KpnI HindIII
 5'-CGCGGATCCGTCGACCTGCAGGATTGGTTGTGTGTTGTTTT 3' (SEQ ID NO:12)
 BamHI SalI PstI

Please replace the second full paragraph on page 40 (Example 12) with the following paragraph:

B9
**Example 12 - Identification and multimerisation of an SA/BTH responsive element in the
 AoPRT-L promoter.**

A series of 3 AoPRT-L 5' promoter deletion - GUS fusion constructs were constructed using the
 following primers designed to regions of the AoPRT-L promoter (Figure 15a):-

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5' GCGAAGCTTCCATGTCATGAGAGAAGCAC 3' (-361 bp) (SEQ ID NO:13)

HindIII

5' GCGAAGCTTTTTGGAAACTGAATACCTACA 3' (-247 bp) (SEQ ID NO:14)

HindIII

5' GCGAAGCTTACAAAGGCTTAGACTTTCCA 3' (-132bp) (SEQ ID NO:15)

HindIII

Each of the above primers, in conjunction with the primer below, was used in a PCR reaction with p22-JIT60 as template:-

5' GGGATCCGTCGACCTGCAGATTGGTTGTGTGTTGTTTTTG 3' (SEQ ID NO:16)

BamHI

Sall

PstI

Please replace the second paragraph on page 41 with the following paragraph:

In order to construct an AoPRT-L promoter that has higher expression, the region -247 bp to -133 bp was amplified from p22-JIT60 and placed twice in front of a -247 bp AoPRT-L promoter. This AoPRT-Lx3 promoter was constructed as follows:- The primers below were used to PCR the 0bp to -247bp AoPRT-L promoter from p22-JIT60.

5'-TCTAGGTACCCTTTGCGTGGTTCGACTTGGAAACTGAATACCTAC-3' (SEQ ID NO:17)

KpnI

Sall

5' GGGATCCGTCGACCTGCAGATTGGTTGTGTGTTGTTTTTG 3' (SEQ ID NO:16)

BamHI Sall PstI

This was cloned as a KpnI, PstI fragment into pUC19. The 133bp to-247bp pAoPRT-L region was amplified with the primers:-

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5' TCTAGGTACCCTTTGCGTGGTCGACTTGGAAACTGAATACCTAC 3' (SEQ ID NO:18)

KpnI

SalI

5' GAAAGTCTAAGCCTCGAGGGAATAAGGTACGAGTTCGTGGAC 3' (SEQ ID NO:19)

XhoI

Bio
cont